

BAY AREA AIR QUALITY MANAGEMENT DISTRICT**PERMIT SERVICES DIVISION****APPLICATION PROCESSING AND CALCULATIONS**

Pages 3	Page 1
Appl No. 06909	Date 03/25/2003
Processed By E.Y. Chan	

**NBC KNTV; Plant #15172
848 Battery St, San Francisco 94111**

BACKGROUND

NBC KNTV is for a Permit to Operate for the following new emergency:

S-1 Diesel Standby Generator, Cummins 200DGFC, 317 hp

EMISSIONS SUMMARY

Basis: CARB Executive Order U-R-002-0160 emission factors for this engine family and 52 hr/yr of non-emergency use @ 14.9 gal/hr maximum fuel usage.

	g/hp-hr	BACT	abatement	lb/hr	lb/yr	tpy
POC	0.73	1.5	0.14	0.071	3.71	0.002
NOx	3.37	6.9	0.94	2.214	115.12	0.058
CO	0.447	2.75	0.19	0.059	3.09	0.002
PM	0.067	0.15	0.79	0.037	1.92	0.001

SO₂: (0.05% S) (1/100%) (774.8 gal/yr) (6.11 lb/gal) (2 SO₂/S) = 4.73 lb/yr = 0.002 tpy

PLANT EMISSIONS

Pollutant	tons/year		
	current	application increase	New Total
PM-10	0	0.001	0.001
POC	0	0.002	0.002
Nitrogen Oxides	0	0.058	0.058
Sulfur Dioxide	0	0.002	0.002
Carbon Monoxide	0	0.002	0.002

TOXIC RISK SCREENING ANALYSIS

Since S-1's diesel particulate emission exceeds 0.64 lb/yr, a Toxic Risk Screen is required. Per Toxic Section's 2/19/03 memo and Risk Screen Report, this project passes its Risk Screening Analysis and its PM-10 emission meeting TBACT limit at 52 hr/yr non-emergency operation:

Receptor	Cancer Risk	Hazard Index
Industrial	3.6 chances in a million	0.0040
Chin Elementary School	0.3 chances in a million	0.0010
Chinese Education Center	0.11 chances in a million	0.0004

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PERMIT SERVICES DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages 3	Page 2
Appl No. 06909	Date 03/25/2003
Processed By E.Y. Chan	

BACT ANALYSIS

This engine meets the BACT2 limits for NOx, CO, and POC of 6.9, 2.75, and 1.5, respectively, for diesel engines greater than 175 hp.

OFFSET ANALYSIS

Per Regulation 2-2-302, this facility does not trigger Offsets because its emissions are less than 15 tpy.

STATEMENT OF COMPLIANCE

S-1, diesel emergency generator, meets the Emergency Standby Engines provisions of Reg 9-8-330 and 9-8-530.

This project is considered to be ministerial under the District's CEQA Regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors and therefore is not discretionary as defined by CEQA (MOP chapter 2.3).

This project is over 1000 feet from the nearest school and is therefore not subject to the public notification requirements of Reg 2-1-412.

Offsets, PSD, NSPS, and NESHAPS do not apply to this project.

CONDITIONS

For Standby Generator S-1 at Plant #15172

Stationary Equipment Requirements

1. Hours of Operation: The owner/operator shall operate the emergency standby engine(s) only to mitigate emergency conditions or for reliability-related activities. Operating while mitigating emergency conditions is unlimited. Operating for reliability-related activities is limited to 52 hours per any calendar year. [Basis: Reg. 9-8-330]

2. "Emergency Conditions" is defined as any of the following:

- a. Loss of regular natural gas supply.
- b. Failure of regular electric power supply.
- c. Flood mitigation.
- d. Sewage overflow mitigation.
- e. Fire.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PERMIT SERVICES DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages 3	Page 3
Appl No. 06909	Date 03/25/2003
Processed By E.Y. Chan	

f. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.

[Basis: Reg. 9-8-231]

3. "Reliability-related activities" is defined as any of the following:

- a. Operation of an emergency standby engine to test its ability to perform for an emergency use, or
- b. Operation of an emergency standby engine during maintenance of a primary motor.

[Basis: Reg. 9-8-232]

4. The owner/operator shall equip the emergency standby engine(s) with either:

- a. a non-resettable totalizing meter that measures and records the hours of operation for the engine.
- b. a non-resettable fuel usage meter.

[Basis: Reg. 9-8-530]

5. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 2 years and shall make the log available for District inspection upon request:

- a. Hours of operation (total).
- b. Hours of operation (emergency).
- c. For each emergency, the nature of the emergency condition.

[Basis: Reg. 9-8-530, 1- 441]

RECOMMENDATION

Issue a Permit to Operate for the following source:

S-1 Diesel Standby Generator, Cummins 200DGFC, 317 hp

By: _____

Eric Y. W. Chan
Air Quality Engineer II

Date